

1 **ABSTRACT**

2 An amplifier circuit with a shared current source a first amplifier, a second
3 amplifier and a current source. The output of the first amplifier (10) is coupled to
4 the current source (30). When the second amplifier (20) is cascaded onto the first
5 amplifier (10), the current source (30) is also connected to the second amplifier
6 (20), such that these two amplifiers can share a common drive current, so the
7 power dissipated by these two amplifiers is greatly reduced. This technique is
8 implemented with Class A amplifiers, Class B amplifiers, Class AB amplifiers or
9 a combination of the above amplifiers in cascade.